Looperlative
LP1
Audio Looping Device

Version 1.00

User Manual
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Quick Start:

- Unpack the LP1 from shipping carton. Please save shipping carton.
- Mount the LP1 in an empty space in your rack. The LP1 is not designed for desktop use. Please properly mount your LP1 in a rack case or floor-standing rack.
- Connect the audio source to the audio inputs on the rear panel. The LP1 accepts unbalanced tip-ring 1/4" connectors. The audio inputs accept line levels only. Only connect line-level outputs from other equipment.
- Connect the audio outputs to line-level inputs on your amplifier, mixing console, or other effects boxes.
- If you are using a remote MIDI controller, attach it with a MIDI cable to the MIDI input connector on the back of the LP1.
- Plug the cable of the supplied power adapter into the power connector on the back of the LP1.
- Plug the power adapter into an appropriate power outlet.
- Turn on the power to your LP1.
- Your LP1 will display "LP1 loading ..."
- After about 8 seconds, the LP1 will display "Looperlative LP1" on the top line and the software version on the bottom line.

Setting Audio Levels:

To get the best possible audio from your sound system. It is important to correctly set audio levels. On the display are two bars that indicate input and output audio levels. The bar on the left indicates the input audio level and the bar on the right indicates the output audio level.

If the input audio level is too low or too high, adjust the volume on your audio source. Audio levels should be set as high as possible without distortion.

When using multiple tracks or overdubbing it is possible to overdrive the output of the LP1 and cause distortion. If this occurs, adjust the "Master Level" from the "All Tracks" menu. A setting of -1 or -2 is often sufficient.

Recording your first loop:

- Press “REC/DUB” or program change 0 on your MIDI controller to begin recording.
- Play your musical phrase that you want looped.
- Press “REC/DUB” or program change 0 on your MIDI controller to end the loop and enter overdub mode.
- When you have completed overdubbing to the track, press “REC/DUB” one more time to change from overdub mode to play mode.
- Press “PLAY/STOP” to stop playback of the loop.

Installation:

- Connect audio connections to other equipment.
- Connect MIDI connections if they will be used.
- Connect network connection if it will be used.
- Connect power supply to back of the unit.
- Plug power supply into wall socket or power strip.
- Turn on power switch on the front panel.
- Wait approximately 15 seconds for the unit to complete its software load procedure. The front panel will display the software version number when the unit is ready to use.

Back Panel:

The prototype LP1 has 9 connectors on the back. From left to right, these connectors are:

- Power (9-12VDC, positive center)
- Network connector
- MIDI in
- MIDI through
- MIDI out

- Audio input left
- Audio input right
- Audio output left
- Audio output right
- Aux 1 output left
- Aux 1 output right
- Aux 2 output left
- Aux 2 output right

Power:

Use the adapter supplied with the LP1. The LP1 requires a 9 or 12VDC power supply capable of supplying at least 700mA of power.

Network:

The LP1 accepts a standard Category 5 RJ45 connector for ethernet. The other end of the cable can be connected to any 10 or 100 MBPS ethernet connection. If connected to a network with access to the Internet, the LP1 can be commanded to update its software.

MIDI connectors:

The MIDI connectors accept the standard 5-pin circular DIN connector for MIDI. It is recommend that any MIDI controller be placed in the chain as close to the LP1 as possible to avoid delays caused by some MIDI devices.

Audio inputs:

Audio inputs are ¼-inch unbalanced connectors. These inputs accept line-

level inputs. Audio levels should be adjusted to achieve the maximum signal level without distortion. This will provide the best possible signal-to-noise ratio.

Audio outputs:

Audio output are ¼-inch unbalanced connectors. These are line-level outputs and should only be connected to line-level inputs of other equipment. Audio connections should be made before powering on the unit.

Front panel:

The front panel has the following items:

- 1 power switch
- 1 two-line display
- 1 selector knob
- 1 MENU button
- 1 ENTER button
- 1 REC/DUB button
- 1 PLAY/STOP button
- 4 user programmable buttons
- 1 ALL track menu selection button
- 8 track selection buttons labeled 1 through 8
- 8 track status lights

Menu Operation:

The selector knob (knob) allows you to scroll through menu items and to change the value of a menu item. Menu items are displayed on the second line of the panel. To select a menu item:

- Turn the knob until the menu item is displayed.
- Press ENTER.

To change the value of a menu item:

- Select the menu item.
- Turn the knob until the value you want to select is displayed.
- Press ENTER

The MENU button returns the display to the previous menu.

The track selection buttons select a track for recording or changing. After selecting a track, turn the knob to select a menu choice. Selecting a track

also allows you to record, overdub, start or stop that track.

Rec/Dub Button:

The Rec/Dub button controls record and overdub operations of tracks. It is a multifunction button depending on the state of the currently selected track. If the track is currently empty or stopped, then the Rec/Dub will begin recording a new loop. If the track is recording, the loop is closed and placed in overdub mode. If the track is playing, the loop is placed in overdub mode.

Play/Stop Button:

The Play/Stop button is a multifunction button that controls playback of a loop. If a track is stopped, the loop begins playing when the loop counter reaches the beginning of the loop. If the track is playing, the loop stops playing when the loop reaches the end. If the track is empty and a master track is recorded, a blank synchronized track is created.

Track Buttons:

The numbered track buttons are used to select a specific track. Other functions such as record or play work on the currently selected track. The track buttons are also used during advanced MIDI button programming to select the sequence position. The display will show the track menu when one of these buttons are pressed.

All Button:

The All button selects all tracks. The all track menu is displayed when this button is pressed.

Track lights:

The track lights above each track selection button indicate the state of each track. The states displayed are:

Light color and action	***Track state***
Light off	Track empty
Light blinking red	Audio recording to the track
Light blinking green	Audio overdubbing on the track
Light solid red	Audio recorded to the track, but the track is not playing
Light solid green	Audio recorded to the track and it is playing

Recording a new unsynchronized loop:

To record a loop to a track:

- Select an empty track (track light is off).
- Press the REC/DUB button or press the MIDI button assigned to this function.
- Play the audio that you want to record.
- Press the PLAY/STOP button or the MIDI button assigned to this function to begin looping the audio.

Recording a new synchronized loop:

Synchronized loops are loops that are locked in time with each other. In other words, if you have two tracks, the music in those tracks will always stay together. You synchronize a loop to the master track. By default, the master track is the first loop recorded. You can change the master track at any time, which will not affect previous synchronizations.

Any track can be selected as the master track using the track menu. To select a master track:

- Press the track number button.
- Turn the knob until the front panel displays, "Set As Master."
- Press ENTER.

Or,

- Do nothing, and the first loop recorded will be the master track.

To create a new synchronized track:

- Select an empty track.
- Press the PLAY/STOP button or equivalent MIDI button. This will create an empty loop of exactly the same length as the master track.
- Press the REC/DUB to begin overdubbing on the new empty track.
- Play the audio that you want to record.
- Press the PLAY/STOP button to end overdubbing and continue looping.

Starting and stopping a recorded track:

The PLAY/STOP button starts and stops playback of a track when it is not currently overdubbing or recording. This button is synchronized to the end of loop. Using this button to stop a playing track will be delayed until the loop ends. A USER button or MIDI button can be programmed to perform a “Stop Now” function which does not wait for the end of the loop. Also, “Stop Now” can be selected from the track menu.

To stop all of the playing tracks, press the ALL button and then the PLAY/STOP button. The “Stop Now” functions are also available for stopping all tracks.

Programming the LP1 to MIDI pedals or dials:

The LP1 can accept MIDI CC messages to control volume and feedback. To program a MIDI pedal, follow the following procedure:

- Press the MENU button until the main menu is selected. The main menu says “Looperlative LP” on the top line of the display.
- Turn the knob until the second line of the display reads “Calibrate Pedal.”
- Press ENTER.
- The display will read “MIDI controller?”
- Change the pedal position and then press ENTER.
- The display will read “Move nn To Min.” “nn” will be replaced by the CC number of the pedal.
- Move the pedal to its minimum position.
- Press ENTER.
- The display will read “Move nn To Max.” “nn” will be replaced by the CC number of the pedal.
- Move the pedal to its maximum position.
- Press ENTER.
- Turn the knob to the desired function that you want to assign to this pedal.
- Press ENTER.

Programming the LP1 to respond to MIDI buttons or USER buttons:

The LP1 can accept MIDI program change messages to activate a variety of functions. To program a button on a MIDI controller, follow the following procedure:

- Press the MENU button until the main menu is selected. The main menu says “Looperlative LP1” on the top line of the display.
- Turn the knob until the second line of the display reads “MIDI/USER

btn."
- Press ENTER.
- The display will read "Press button."
- Press the MIDI button or USER button that the LP1 will respond to.
- The display will indicate which button you selected.
- Turn the knob to change the LP1 function on the second line of the display. This is the function that will be assigned to the selected button.
- Press ENTER to accept the selection.

The MIDI configuration is remembered when the unit is powered off.

ADVANCED BUTTON CONFIGURATION:

Each button can perform up to 8 different functions in order with a single button press. When using the above procedure to assign functions to each button, you are actually assigning a sequence of functions to each button. In the above procedure, you only assign the first step in each sequence.

To assign additional functions in the sequence, you use the track selection buttons to select the sequence position that you want to assign. For example, to assign the second step, press the track 2 button.

EXAMPLE: Assigning the USER 4 button to reverse and half-speed

- Press the MENU button until the main menu is selected. The main menu says "Looperlative LP1" on the top line of the display.
- Turn the knob until the second line of the display reads "MIDI/USER btn."
- Press ENTER.
- The display will read "Press button."
- Press the USER 4 button.
- The first line will now read, "USER 4 : 1".
- Turn the knob until the second line reads, "Reverse Track."
- Press the track 2 button.
- The first line will now read, "USER 4 : 2".
- Turn the knob until the second line reads, "Half Speed Tr."

- Press the track 3 button.
- Turn the knob until the second line reads, “end sequence.”
- Press ENTER to accept the selection.

Assignable Functions:

Function:	***Meaning:***
Rec/Dub	This is the same as the Rec/Dub button on the front panel. First press begins recording a loop. The second press ends the loop and places the loop in overdub mode. The third press ends overdub and leaves the loop in play mode. Subsequent presses toggle overdub on and off.
Play/Stop	This is the same as the Play/Stop button on the front panel. This is a multifunction button that starts or stops playback of a loop, creates an empty synchronized loop, or closes a loop depending on the current state of the loop.
All Tracks	Select all tracks for next command.
Select Track(n)	Select track n (n = 1,2,3,4,5,6,7,8) for next command.
Select Group(n)	Select group n (n = 1,2,3,4,5,6,7,8,9,10) for next command.
Track Erase	Erase selected track(s).
Track Level	Change track level.
Play Now	Start playing selected track(s) immediately.
Stop Now	Stop playing selected track(s) immediately.
Play	Start playing selected track(s) when loop counter reaches the beginning.
Stop	Stop playing selected track(s) when loop reaches the end.
All Play Now	Start playing all tracks immediately.

Function:	*Meaning:*
All Stop Now	Stop playing all tracks immediately.
All Play	Start playing all tracks when loop counters reach the beginning.
All Stop	Stop playing all tracks when the loops reach the end.
Set As Master	Select the current track as the master track for newly synchronized tracks.
Next Track	Select the next higher track number. If all tracks were selected, then track 1 is selected.
Prev Track	Select the next lower track number. If all tracks were selected, then track 8 is selected.
Double	Duplicate the loop making it twice as long.
Triple	Make the loop three times as long copying the loop to fill the new time.
Quadruple	Make the loop four times as long copying the loop to fill the new time.
MIDI sync rec	Same as Rec/Dub button except that when recording a new loop, it is synchronized to the incoming MIDI clock.
Sync Rec/Dub	Same as Rec/Dub button except that when recording to track that isn't the master track, the track is extended to a multiple of the master track length making it synchronized with the master track. If there is no master track or if the master track is the current track, then this operates exactly as the Rec/Dub button.
Reverse Track	Reverse direction of playback of the currently selected track(s).
Half Speed Tr	Toggle between normal speed and half speed for the currently selected track(s).
Feedback 100%	Set the feedback level for currently selected track(s) to 100%

Function:	***Meaning:***
Feedback +10%	Increase the feedback level for currently selected track (s) by 10%
Feedback -10%	Decrease the feedback level for currently selected track (s) by 10%
Feedback +5%	Increase the feedback level for currently selected track (s) by 5%
Feedback -5%	Decrease the feedback level for currently selected track (s) by 5%
Play Retrigger	Starts playback of a loop from the beginning. If the track is currently playing, it instantly restarts it at the beginning. If the track is stopped, it is started from the beginning.
Cue Track	Marks selected track(s) as ready to play. They will be started from the beginning as soon as any other track stops.

LIMITED WARRANTY:

This product is warranted to the original consumer purchaser to be free from defects in materials and workmanship under normal installation, use and service for a period of one (1) year from the date of purchase as shown on the purchaser's receipt.

The obligation of Looperlative Audio Products under this warranty shall be limited to repair or replacement (at our option), during the warranty period of any part which proves defective in material or workmanship under normal installation, use and service, provided the product is returned to Looperlative Audio Products, transportation charges prepaid. Products returned to us must be accompanied by a copy of the purchase receipt. In the absence of such purchase receipt, the warranty period shall be one (1) year from the date of manufacture.

This warranty shall be invalid if the product is damaged as a result of defacement, misuse, abuse, neglect, accident, destruction or alteration of the serial number, improper electrical voltages or currents, repair, alteration or maintenance by any person or party other than our own service facility, or any use violative of instructions furnished by us.

This one-year warranty is in lieu of all expressed warranties, obligations or liabilities. Any implied warranties, obligations, or liabilities, including but not limited to the implied warranties of merchantability and fitness for a particular purpose, shall be limited in duration to the one year duration of this written limited warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

In no event shall we be liable for any special, incidental or consequential damages for breach of this or any other warranty, expressed or implied, whatsoever. Some states do not allow the exclusion or limitation of special, incidental or consequential damages so the above limitation or exclusion may not apply to you. This warranty gives you

specific legal rights, and you may also have other rights which vary from state to state.